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FISH AND SHELLFISH PREFERENCES OF HOUSEHOLD CONSUMERS - 1951

JUL 28 1952

PART I - National Summary

FISHERY LEAFLET 407
FISH AND WILDLIFE SERVICE
United States Department of the Interior

United States Department of the Interior, O. L. Chapman, Secretary
Fish and Wildlife Service, Albert M. Day, Director

Fishery Leaflet 407

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FISH AND SHELLFISH PREFERENCES OF HOUSEHOLD CONSUMERS-1951 1/

Part I - National Summary

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1/ Based on interviews conducted by the firm of Alfred Politz Research, Inc., under contract with the Fish and Wildlife Service.

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This initial report results from a Nation-wide survey of fish and shellfish preferences of household consumers, conducted under the auspices of the Fish and Wildlife Service in October 1951. Of 2,473 persons questioned concerning their individual households, 2,335, or 94.4 percent, indicated that their households consumed some kind of fishery product, and only 138, or 5.6 percent, indicated that their households consumed no fishery product of any kind. Many of the latter were small one- or two-person households. It is interesting to note the high percentage of the population of the United States which used fishery products (regardless of volume) during the twelve months preceding the survey.

In those households where fish and shellfish were used in some form, questions in detail were asked about consumption of fish and shellfish, particularly frozen fish and shellfish. The questionnaire stressed the latter items because of the more pressing need for market expansion of these products and the trend in that direction. The frozen fish and shellfish producing segment of the fishery industries is plagued with problems of heavy imports, occasional oversupply, misjudging of market demand, etc. Increased consumption offers a solution at least in part to these problems as well as a contribution to the well-being of consumers. It is in this spirit that the survey was undertaken. However, the survey contains information of value to all segments of the domestic fishery industries concerned with increasing fish and shellfish consumption in the United States.

This report summarizes the information obtained from the survey on a national basis. Further reports summarizing tabulations by region, farm and non-farm responses, income, etc., will be made under subsequent fishery leaflet numbers. All of the material in these fishery leaflets will be combined later into a final report. This report, in addition, will give more detailed information as to survey methods, characteristics, etc. than is shown below.

SURVEY METHODS AND CHARACTERISTICS

A copy of the questionnaire which was used in the survey is reproduced in the appendix. The persons questioned, mostly housewives, were selected by accepted area-sampling methods to represent the entire population of the country. A stratified random sample was used. The stratification of the sample was based on criteria available from previous censuses and surveys. Data on population by metropolitan areas, nonmetropolitan counties and geographic regions, density of population, percent of persons engaged in agriculture, percent of homes with mechanical refrigeration, and percent of women in the labor force, conditioned the selection of the sample. In connection with the probability aspects of the sample, the established two standard errors, which are widely used in measuring the accuracy of the results in this type of survey, indicate the following tolerances at the 19 in 20 probability level:

Approximate Sampling Tolerances
(at the 19 in 20 probabiltiy level)

Portion of the sample from which percentage is derived	Size of Tabulated Percentage				
	10% or 90%	20% or 80%	30% or 70%	40% or 60%	50%
	%	%	%	%	%
Base = 100% (entire sample)	2.5	3.4	3.8	4.1	4.2
Base = 50% of sample	2.9	3.9	4.5	4.8	5.0
Base = 10% of sample	4.0	5.1	6.0	6.3	6.5

The table may be applied to the data beginning on page 6 herein. It shows, for example, that the chances are 19 in 20 that a reported figure of 80 percent which is based on the total interviews will be within plus or minus 3.4 percentage points of the true value (the value which would be obtained by taking a complete census of the population). If this 80 percent were derived not from the entire sample, but some group constituting only one-half of the sample, the tolerance would be 3.9 percentage points.

The characteristics of the sample obtained in this survey are given following the pages herein which give the answers to the survey questions. Some of thes characteristics can be compared to available census and survey data and others cannot since they do not represent the same concepts. Some of the more important characteristics are comparable and show similarities to available check data. As was indicated earlier, the data obtained and summarized herein nationally will be summarized in the detail of certain of these characteristics in subsequent reports of this series. For example, the next report is planned to give details concerning the regional populations and the following report details by rural and urban populations.

The tabulations of the replies to the questionnaire on a national basis are given on pages 6 to 36. The summaries of the replies for each question analyzed are given in percentages. Because of their nature, some of the questions were asked only part of the total number of respondents and the summaries are made accordingly. The number of respondents asked a particular question is given at the end of a summary or in footnotes thereto. Except where special conditions are indicated by footnotes or otherwise each percentage in the summaries may be applied to the total number of households in the United States, and may be considered an estimate of the reaction of that group of the population, subject to the range of error cited previously. When the answers to the questions are desired on a unit basis rather than percentages, simply apply the percentages to the figure given under "number asked" or "number of answers", etc. at the end of each summary.

MAJOR FINDINGS

There are many interesting points which may be noted with respect to household-consumer preferences for fish and shellfish. Subject to the range of error given in the previous section, the following estimates are made of the percentage of United States households which used various types of fishery products during the period of one year preceding October 1951:

Product	Percent
Frozen shellfish	19.4
Fresh shellfish	26.2
Canned shellfish	20.4
Frozen fish	52.2
Fresh fish	70.0
Canned fish	77.7
Cured fish	20.3

It is surprising to note that most households do not associate a particular season with more-frequent serving of fresh or frozen fish or shellfish. In the same manner the majority does not associate a particular day with the serving of these products, although of the minority which does associate a particular day with the serving of these products, Friday is the most popular day.

The survey indicates that most people can generally get the kind of fresh or frozen fish or shellfish they want. Instances where respondents indicated that they couldn't get a particular fishery product which they desired were in the minority. The distribution system for these fishery products as presently constituted seems to operate effectively, although it may be that inertia and close familiarity with the present distribution system are the reasons for this. The questionaire was not designed to obtain definite information on this subject. Regardless there is no denying that the present distribution system should be constantly subjected to improvement.

The principal reason given for liking frozen fish and shellfish was ease of preparation, and the principal reason given for liking fresh fish and shellfish was taste or flavor. Individual species or products usually served are given in the summaries of replies to questions which follow. If it cost the same amount to serve fresh fish or frozen fish most households would prefer to serve fresh fish.

Specifically, with respect to frozen fish, by far the great majority of persons fry this product when cooking it. Most persons prefer to buy fillets and they prefer them with skins off. A serving of one-half pound per person was the amount calculated to be required in most cases. The type of store where frozen fish was last bought was predominately the super market. Frozen fish wrapped only in cellophane was the type of packaged product bought most often principally because it was the only type of packaged frozen fish available for purchase, although it was also indicated that that type of packaging is the one generally most preferred. Many people like the fact that you can see the contents of this type of package. Most people who use frozen fish feel that their present consumption is about a maximum and that they would not purchase any more because they use enough now.

With respect to consumer-pack frozen fish, most persons prefer the one pound size and a long, flat shape. There is some interest in the purchase of a complete frozen fish or shellfish dinner containing fish or shellfish, potatoes, and vegetables in a ready-to-heat container. A relatively small percentage of households are served by mail order and there does not appear to be any great interest in purchasing either frozen fish or shellfish in this manner.

These are just a few of the major points of interest developed in the survey and reported herein. Many more may be found in the ensuing summaries.

SUMMARIES OF REPLIES TO QUESTIONS

Frequency Of Use

Frozen shellfish

Have you served it during the past year?	Percent
Yes	19.4
No	80.0
Don't know	.4
Blank, etc.	.2
Total	100.0
Number asked	2473

When was the last time you served frozen shellfish?	Percent
Within the past week	8.2
Within the past month	30.8
Within the past year	47.7
Don't remember	11.0
Blank, etc.	2.3
Total	100.0
Number asked	480

Is there any particular season that you serve it more than other seasons?	Percent
Summer	6.5
Fall	2.9
Winter	9.0
Spring	4.0
Fall and winter	.4
Summer and spring	.2
No particular season	77.0
Total	100.0
Number asked	480

How often do you serve it in this season?

Data insufficient - not analyzed

Frozen shellfish (Continued)

Is there a particular day of the week that you serve it?	Percent
Monday	.2
Tuesday	-
Wednesday	.2
Thursday	.4
Friday	34.6
Saturday	.8
Sunday	.6
No particular day	62.8
Blank, etc.	.4
Total	100.0
Number asked	480

What do you particularly like about frozen shellfish?		Percent
Reasons given:		
Taste		31.8
Like flavor	30.8	
Uniformity of flavor	1.0	
Ease of preparation		46.1
Easy to prepare	42.3	
Cooks better	.2	
Cleaned or cleaner	1.7	
Good for cocktails, salads, etc.	1.9	
Ease of storage		8.4
Easy to store in refrigerator	8.4	
Availability		6.0
Frozen easily available	6.0	
Price		1.0
Cheaper	1.0	
Miscellaneous		6.7
No bones	1.0	
Like tenderness	.2	
Less odor	.2	
Gives variety in diet	5.3	
Total		100.0
Number of answers 2/		418

2/ Of the 480 respondents asked this question some did not answer and a few gave more than one reason.

Frozen shellfish (Continued)

Can you generally get the kind of frozen shellfish you want?	Percent
Yes	78.5
No	6.5
Don't know	3.1
Blank, etc.	11.9
Total	100.0
Number asked	480

What kind do you usually serve?	Percent
Shrimp	72.7
Lobsters	12.7
Crabmeat	10.2
Oysters	5.6
Scallops	5.4
Clams	1.0
No particular kind	5.6
Total	113.2 3/
Number asked	480

Fresh shellfish

Have you served it during the past year?	Percent
Yes	26.2
No	73.2
Don't know	.3
Blank, etc.	.3
Total	100.0
Number asked	2473

3/ A few respondents did not answer this question and some gave more than one species so that total adds to more than 100 percent.

Frequency Of Use (Continued)

Fresh shellfish (Continued)

When was the last time you served fresh shellfish?

	Percent
Within the past week	16.7
Within the past month	27.3
Within the past year	40.9
Don't remember	14.7
Blank, etc.	.4
Total	100.0
Number asked	650

Is there any particular season that you serve it more often than other seasons?

	Percent
Summer	8.0
Fall	3.4
Winter	10.5
Spring	2.5
Fall and winter	1.8
No particular season	69.6
Blank, etc.	4.2
Total	100.0
Number asked	650

How often do you serve it in this season?

Data insufficient - not analyzed

Is there a particular day of the week that you serve it?

	Percent
Monday	.2
Tuesday	.1
Wednesday	.6
Thursday	.8
Friday	30.6
Saturday	1.7
Sunday	.8
No particular day	64.5
Blank, etc.	.7
Total	100.0
Number asked	650

Fresh shellfish (Continued)

What do you particularly like about fresh shellfish?

	Percent
Reasons given:	
Taste	70.6
Like flavor	69.0
Uniformity of flavor	1.0
Like lobster	.4
Children like	.2
Ease of preparation	12.0
Easy to prepare	7.2
Cooks better	.2
Cleaned or cleaner	.6
Good for cocktails, salads, etc.	4.0
Ease of storage	.2
Easy to store in refrigerator	.2
Availability	2.4
Fresh easily available	1.4
Frozen not available	.2
Go sport fishing	.8
Price	2.2
Cheaper	2.2
Nutrition	2.4
Nutritious, healthy	2.4
Habit	2.4
Prejudiced to fresh	2.2
Habit	.2
Miscellaneous	7.8
No bones	.4
Gives variety in diet	6.8
Like appearance	.6
Total	100.0
Number of answers 4/	499

4/ Of the 650 respondents asked this question some did not answer and a few gave more than one reason.

Frequency Of Use (Continued)

Fresh shellfish (Continued)

Can you generally get the kind of fresh shellfish you want?	Percent
Yes	69.3
No	9.1
Don't know	5.5
Blank, etc.	16.1
Total	100.0
Number asked	650

What kind do you usually serve?	Percent
Shrimp	51.8
Oysters	18.5
Lobsters	17.5
Crabmeat	16.6
Clams	7.5
Scallops	4.9
Black mussels	.3
Squid	.2
Snails	.2
Octupus (devilfish)	.2
No particular kind	7.7
Total	125.4 5/
Number asked	650

Canned shellfish

Have you served it during the past year?	Percent
Yes	20.4
No	77.6
Don't know	.5
Blank, etc.	1.5
Total	100.0
Number asked	2473

5/ A few respondents did not answer this question and some gave more than one species so that total adds to more than 100 percent.

Canned shellfish (Continued)

What kind do you usually serve?	Percent
Shrimp	49.3
Crabmeat	33.8
Lobster	13.2
Oysters	8.5
Clams	1.8
No particular kind	4.9
Total	111.5 6/
Number asked	506

Frozen fish

Have you served it during the past year?	Percent
Yes	52.2
No	47.4
Don't know	.3
Blank, etc.	.1
Total	100.0
Number asked	2473

When was the last time you served frozen fish?	Percent
Within the past week	18.6
Within the past month	41.3
Within the past year	30.0
Don't remember	8.9
Blank, etc.	1.2
Total	100.0
Number asked	1292

6/ A few respondents did not answer this question and some gave more than one species so that total adds to more than 100 percent.

Frequency Of Use (Continued)

Frozen fish (Continued)

Is there any particular season that you serve it more often than other seasons?

	Percent
Summer	2.3
Fall	1.6
Winter	6.7
Spring	5.0
No particular season	81.7
Blank, etc.	2.7
Total	100.0
Number asked	1292

How often do you serve it in this season?

Data insufficient - not analyzed

Is there a particular day of the week that you serve it?

	Percent
Monday	.2
Tuesday	.1
Wednesday	.3
Thursday	.5
Friday	36.6
Saturday	.9
Sunday	.2
No particular day	60.0
Blank, etc.	1.2
Total	100.0
Number asked	1292

Frequency Of Use (Continued)

Frozen fish (Continued)

What do you particularly like about frozen fish?	Percent
Reasons given:	
Taste	23.0
Like flavor	20.5
Uniformity of flavor	2.1
Children like	.4
Ease of preparation	42.3
Easy to prepare	38.2
Cooks better	.2
Cleaned or cleaner	3.9
Ease of storage	11.8
Easy to store in refrigerator	11.8
Availability	6.4
Frozen easily available	6.4
Price	3.3
Cheaper	3.3
Nutrition	.4
Nutriticus, healthy	.4
Habit	.1
Habit	.1
Miscellaneous	12.7
No bones	5.9
Like tenderness	.3
Less odor	.6
Gives variety in diet	5.5
Like appearance	.4
Total	100.0
Number of answers 1/	1132

Can you generally get the kind of frozen fish you want?	Percent
Yes	75.6
No	4.6
Don't know	3.4
Blank, etc.	16.4
Total	100.0
Number asked	1292

1/ Of the 1292 respondents asked this question some did not answer and a few gave more than one reason.

Frozen fish (Continued)

What kind do you usually serve?	Percent
Ocean perch	26.3
Haddock	22.3
Flounder	13.3
Halibut	10.3
Cod	8.5
Salmon	6.2
Whiting	1.5
Swordfish	.9
Mackerel	.6
Mullet	.4
Red snapper	.4
Smelt 8/	.3
Croaker	.3
Red drum	.2
Perch	.2
Shad	.2
Herring 8/	.2
Bluefish	.2
Eel	.1
Steakfish (shark)	.1
Rockfish	.1
All freshwater species 9/	8.6
No particular kind	16.6
Total	117.8 10/
Number asked	1292

Fresh fish

Have you served it during the past year?	Percent
Yes	70.0
No	29.4
Don't know	.3
Blank, etc.	.3
Total	100.0
Number asked	2473

8/ Unable to distinguish between freshwater and saltwater varieties.
9/ Excluding a small amount of those varieties marked above with footnote 8/.
10/ A few respondents did not answer this question and some gave more than one species so that total adds to more than 100 percent.

Frequency Of Use (Continued)

Fresh fish (Continued)

When was the last time you served fresh fish?	Percent
Within the past week	21.1
Within the past month	35.0
Within the past year	32.4
Don't remember	9.2
Blank, etc.	2.3
Total	100.0
Number asked	1732

Is there any particular season that you serve it more often than other seasons?	Percent
Summer	13.5
Fall	2.0
Winter	3.8
Spring	6.1
No particular season	70.4
Blank, etc.	4.2
Total	100.0
Number asked	1732

How often do you serve it in this season?

Data insufficient - not analyzed

Is there a particular day of the week that you serve it?	Percent
Monday	.2
Tuesday	.4
Wednesday	.4
Thursday	1.2
Friday	34.0
Saturday	2.1
Sunday	.4
No particular day	58.8
Blank, etc.	2.5
Total	100.0
Number asked	1732

Fresh fish (Continued)

What do you particularly like about fresh fish?	Percent
Reasons given:	
Taste	67.8
Like flavor	66.4
Uniformity of flavor	1.2
Children like	.2
Ease of preparation	3.6
Easy to prepare	2.7
Cooks better	.5
Cleaned or cleaner	.1
Good for cocktails, salads, etc.	.1
No thawing	.2
Availability	6.0
Fresh easily available	1.1
Go sport fishing	4.9
Price	5.7
Cheaper	5.7
Nutrition	2.5
Nutritious, healthy	2.5
Habit	3.3
Prejudiced to fresh	3.2
Habit	.1
Miscellaneous	11.1
No bones 11/	.7
Like tenderness	.2
Less odor	.2
Gives variety in diet	9.1
Like appearance	.2
Buy whole for baking	.2
Not as moist	.5
Total	100.0
Number of answers 12/	1417

11/ Referring to steaked fish.

12/ Of the 1732 respondents asked this question some did not answer and a few gave more than one reason.

Frequency Of Use (Continued)

Fresh fish (Continued)

Can you generally get the kind of fresh fish you want?	Percent
Yes	60.0
No	14.5
Don't know	5.8
Blank, etc.	19.7
Total	100.0
Number asked	1732

What kind do you usually serve?	Percent
Flounder	8.8
Salmon	6.4
Halibut	6.2
Haddock	6.2
Perch 13/	5.7
Mackerel	4.6
Cod	4.4
Mullet	4.3
Swordfish	2.8
Sea trout (weakfish)	2.4
Red snapper	2.3
Croaker	1.4
Smelt 13/	1.0
Butterfish	1.0
Scup (porgy)	1.0
Whiting	1.0
Bluefish	.7
Sea bass	.7
Spots	.7
Striped bass	.6
Barracuda	.6
Red drum	.5
Shad	.5
Tuna	.3
Herring 13/	.3
King whiting	.2
Eel	.2
Steakfish (shark)	.1
Swellfish	.1
Kingfish (Calif.)	.1
Bonito	.1
Pollock	.1
Pompano	.1
Grouper	.1
Cabrillo	.1
All freshwater species 14/	37.5
No particular kind	18.7
Total	121.8 15/
Number asked	1732

13/ Unable to distinguish between freshwater and saltwater varieties.
14/ Excluding a small amount of those varieties marked above with footnote 13/.
15/ A few respondents did not answer this question and some gave more than one species so that total adds to more than 100 percent.

Frequency Of Use (Continued)

Canned fish

Have you served it during the past year?	Percent
Yes	77.7
No	21.0
Don't know	.4
Blank, etc.	.9
Total	100.0
Number asked	2473

What kind do you usually serve?	Percent
Salmon	62.9
Tuna	56.0
Sardines	13.3
Mackerel	1.9
Cod	1.0
Herring	.3
Anchovies	.2
Caviar	.1
Fish flakes	.1
Kippers	.1
Shad	.1
No particular kind	2.8
Total	138.8 16/
Number asked	1922

Cured fish or shellfish -- pickled, salted, smoked, etc.

Have you served it during the past year?	Percent
Yes	20.3
No	74.0
Don't know	.6
Blank, etc.	5.1
Total	100.0
Number asked	2473

16/ A few respondents did not answer this question and some gave more than one species or product so that the total adds up to more than 100 percent.

Frequency Of Use (Continued)

Cured fish or shellfish — pickled, salted, smoked, etc. (Continued)

What kind do you usually serve? 17/	Percent
Herring	39.3
Salmon	13.2
Cod	8.1
Mackerel	8.0
Whitefish	8.0
Sardines	6.2
Finan haddie	3.2
Mullet	1.6
Swordfish	1.2
Anchovies	.8
Blind robins	.8
Carp	.8
Eel	.6
Spots	.6
Bloaters	.4
Butterfish	.4
Halibut	.4
Barracuda	.2
Flounder	.2
Sea bass	.2
Shrimp	.2
Trout	.2
No particular kind	6.2
Total	100.8 18/
Number asked	501

Preferences - Fresh vs. Frozen Fish and Shellfish

If it cost you the same amount to serve your family fresh fish or frozen fish, which would you prefer?	Percent
Fresh fish	57.6
Frozen fish	20.0
No preference	14.9
Blank, etc.	7.5
Total	100.0
Number asked	2473

17/ Most respondents named a species or several species in their reply and did not indicate the specific type of cure.

18/ A few respondents did not answer this question and some gave more than one species or product so that the total adds up to more than 100 percent.

What would you say is the main advantage of serving "fresh" or "frozen" fish?

		Percent
Fresh fish:		
Taste		66.0
Preparation		9.9
Ease of preparation	5.6	
No thawing	3.9	
Fries better	.4	
Availability:		4.6
Available	2.7	
Variety available	.4	
Go sport fishing	1.5	
Price		4.0
Quality:		9.4
Sure of freshness	8.1	
Sure of quality	1.3	
Nutritious		3.2
Habit and prejudices		3.8
Miscellaneous:		.6
Like appearance	.1	
Packaging	.1	
Less odor	.4	
Total		101.5 19/
Number asked		1425

Frozen fish:		Percent
Taste		12.1
Preparation:		58.2
Ease of preparation	46.9	
Cleaned	11.3	
Storageability		20.2
Availability		5.3
Price		3.0
Quality:		7.6
Sure of freshness	3.8	
Sure of quality	3.8	
Nutritious		.6
Miscellaneous:		10.1
Packaging	.6	
Less odor	2.4	
No bones	7.1	
Total		117.1 19/
Number asked		495

19/ A few respondents did not answer this question and some gave more than one answer so that total adds to more than 100 percent.

Is there anyone in your family who will eat fresh fish but will not eat frozen fish?

	Percent
Yes	10.1
No	71.3
Don't know	10.6
Blank, etc.	8.0
Total	100.0
Number asked	2473

How many are children under 15 and how many are adults that will not eat it?

	Percent 20/
Adults	6.4
Children under 15	3.6
Number asked	251

Generally speaking, do you think people serve fish more often when meats go up in price or not?

	Percent
Yes	52.4
No	13.2
Don't know	25.1
Blank, etc.	9.3
Total	100.0
Number asked	2473

Is there any particular reason why you don't use frozen fish?

Reasons given:		Percent
Taste		48.9
Price		11.8
Availability		7.9
Prefer fresh fish:		14.7
Prejudiced to fresh fish	9.3	
Fresh available	3.2	
Go sport fishing	2.2	
Other competitive foods:		1.3
Supply of meat	.9	
Miscellaneous foods	.4	
Preparation:		2.6
Thawing	1.2	
Trouble to cook	1.4	
Health:		1.4
Not as nutritious	.8	
Allergy	.3	
Diet restricted	.3	
Odor		1.4
Storage:		1.0
Haven't suitable refrigeration	.4	
Too much in package	.6	
Quality:		1.1
Soft, moist, etc.	.8	
Can't tell quality	.3	
Never tried		7.9
Total		100.0
Number of answers 21/		937

20/ For adults percent of all adults in sample and for children percent of all children in sample.

21/ Of the 1172 respondents who did not serve frozen fish some did not answer this question and a few gave more than one reason.

Preferences - Fresh vs. Frozen Fish and Shellfish (Continued)

Which do you use more often -- fresh or frozen shellfish?	Percent
Fresh shellfish	42.4
Frozen shellfish	35.2
About the same	22.4
Total	100.0
Number of answers 22/	245

Which do you use more often -- fresh or frozen fish?	Percent
Fresh fish	38.3
Frozen fish	45.8
About the same	15.9
Total	100.0
Number of answers 22/	805

Particular Preferences - Frozen Fish and Shellfish

General - cooking, cuts preferred, availability, etc.

How about frozen fish -- do you think people buy frozen fish more often when meat prices go up than they ordinarily do or not?	Percent
Yes	56.3
No	13.0
Don't know	26.9
Blank, etc.	3.8
Total	100.0
Number asked	1292

22/ These questions were asked an undertermined number of respondents who served either both fresh and frozen shellfish or fresh and frozen fish and percentages are based on number of answers.

General - cooking, cuts preferred, availability, etc. (Continued)

What methods of cooking frozen fish do you usually use -- that is, frying, baking, broiling, boiling, or any other way?

	Percent
Frying	73.9
Baking	6.4
Boiling	.7
Frying and baking	10.3
Frying and boiling	1.3
Frying, baking and boiling	.7
Broiling: Flame	12.4
Electric	6.4
Total	121.1 23/
Number asked	1292

In your experience with frozen fish have you found the quality to change from time to time?

	Percent
Changes	11.8
Generally the same	78.4
No opinion	8.8
Blank, etc.	1.0
Total	100.0
Number asked	1292

In what way have you found the quality to change?

	Percent
Taste changes -- woody, dry, strong	66.4
Stale, old, not fresh, wormy, spoiled	19.1
Thawed, poor refrigeration	4.6
Water content excessive	3.3
Odor	3.3
Discoloration	3.0
Brand and size variations	3.0
Total	102.7 24/
Number asked	152

23/ A few respondents did not answer this question and some gave more than one answer so that total adds to more than 100 percent.

24/ 11.8 percent of those who served frozen fish in the past year found changes in the quality and a few noted more than one change so that total adds up to more than 100 percent.

Particular Preferences - Frozen Fish and Shellfish (Continued)

General -- cooking, cuts preferred, availability, etc. (Continued)

Will you look at this card and tell me what cuts of frozen fish you prefer to buy?

	Percent
1. Whole or round fish	3.9
2. Drawn fish	1.0
3. Dressed fish	7.4
4. Pan-dressed fish	4.6
5. Steaks	23.6
6. Fillets	75.2
Total	115.7 25/
Number asked	1292

The last time you bought frozen fish, which of those cuts did you buy?

	Percent
1. Whole or round fish	2.1
2. Drawn fish	.7
3. Dressed fish	4.5
4. Pan-dressed fish	2.1
5. Steaks	13.0
6. Fillets	70.7
Blank, etc.	6.9
Total	100.0
Number asked	1292

Do you prefer fillets with the skin on or skinless?

	Percent
Skin on	26.2
Skinless	53.4
No preference	18.4
Blank, etc.	2.0
Total	100.0
Number asked	1292

25/ A few respondents did not answer this question and some gave more than one answer so that total adds to more than 100 percent.

General - cooking, cuts preferred, availability, etc. (Continued)

Have you tried frozen fillet of flounder or fillet of sole?	Percent
Yes	46.2
No	41.1
Don't know	11.6
Blank, etc.	1.1
Total	100.0
Number asked	1292

In some sections of the country you can get both East Coast and West Coast fillet of flounder and fillet of sole. Do you happen to know whether you ever tried East Coast fillet of sole or flounder, or West Coast fillet of sole or flounder?	Percent
Tried East Coast fillet of sole or flounder	8.4
Tried West Coast fillet of sole or flounder	4.5
Tried both	8.9
Don't know	78.2
Total	100.0
Number asked	597

Which do you like better, East Coast fillet or West Coast fillet of sole or flounder?

Data insufficient - not analyzed

About how much frozen fish do you buy for each serving--that is, about how much of a pound do you count on for each member of the family?	Percent
1/5	.6
1/4	22.4
1/3	15.5
1/2	49.3
3/4	4.3
2/3	.6
1	3.4
1 1/2	.2
Blank, etc.	3.7
Total	100.0
Number asked	1292

General - cooking, cuts preferred, availability, etc. (Continued)

At what type of store did you last buy frozen fish?

	Percent
Super market	64.6
Independent food store	19.8
Fish store	6.0
General store	2.1
Meat market	1.5
Frozen food locker	1.4
Chain food store	.9
Door to door truck	.6
Other type of store	.6
Mail order	.1
Blank, etc.	2.4
Total	100.0
Number asked	1292

Can you get frozen fish at the place where you do most of your food shopping?

	Percent
Yes	91.0
No	6.3
Don't know	1.2
Blank, etc.	1.5
Total	100.0
Number asked	1292

Can you generally get any kind you want at this store?

	Percent
Yes	79.6
No	8.8
Don't know	3.4
Blank, etc.	8.2
Total	100.0
Number asked	1292

General - cooking, cuts preferred, availability, etc. (Continued)

Is there anything you dislike about the way frozen fish is kept in this store?

	Percent
Dislike:	
Improper refrigeration, thawed	46.9
Lack of variety	21.9
Mixed with other products, hard to get at	21.9
Public handles	3.1
Item not priced	3.1
Package torn	3.1
Total	100.0
Number asked 26/	1292

Packaging

The last time you bought frozen fish, was it unwrapped, wrapped only in cellophane, packed in a box or some other type of package?

	Percent
Unwrapped	4.1
Wrapped only in cellophane	60.4
Packed in box	32.0
Wrapped in paper	1.0
Blank, etc.	2.5
Total	100.0
Number asked	1292

How did it happen you bought this type instead of another?

	Percent
Only type of packaging available	51.5
Kind of fish (species) or cut desired	15.7
See product, visible contents, cellophane	13.0
Looked good	5.7
Sanitary, packaged better	3.4
Advertising, brand	1.2
Best buy, cheaper	2.0
Storageability	3.3
Trial	.4
Habit	2.8
Recipes	.1
Recommended	.7
Holds moisture	.2
Total	100.0
Number of answers 27/	935

26/ Out of the 1292 respondents questioned only 32 had an opinion on this question.

27/ Of the 1292 respondents asked this question some did not answer and a few gave more than one reason.

Packaging (Continued)

Do you prefer to buy your frozen fish unwrapped, wrapped only in cellophane, packed in a box or some other type of package?

	Percent
Unwrapped	2.2
Wrapped only in cellophane	54.5
Packed in box	30.9
Wrapped in paper	.2
Blank, etc.	12.2
Total	100.0
Number asked	1292

Why do you prefer this type? (Asked of respondents who preferred a different type of packaging from the kind they last bought).

	Percent
Convenient for storage and handling 28/	42.5
Visible contents (cello-wrapped)	25.7
Cleaner	18.6
No odor	4.4
Miscellaneous reasons	8.8
Total	100.0
Number of respondents 29/	113

Do you prefer all your frozen fish packed in a box or just certain kinds?

	Percent
All	92.0
Certain kinds	8.0
Total	100.0
Number asked	298

What kinds?

Data insufficient, not analyzed; limited number of replies given for the following species:

Cod 1, flounder 2, haddock 1, halibut 3, salmon 3, shrimp 1, other shellfish 1.

28/ Predominantly package.

29/ There were 113 respondents who preferred a different type of packaging than that last bought and gave a definite reason for such preference.

Packaging (Continued)

Why don't you serve frozen fish more often than you do?	Percent
Use enough now, etc.	65.6
Prefer fresh fish	13.6
Other competing foods	6.0
Not available	5.5
Price	4.5
Preparation	1.0
Habit	.9
Health	.9
Storage space	.9
Odor	.6
Miscellaneous	.5
Total	100.0
Number of answers 30/	1046

Would you look at this list and tell me whether the information on the package about each one is enough or not enough?	Percent
Weight of fish:	
Enough	75.3
Not enough	6.3
Not interested	5.0
Don't know	13.4
Total	100.0
Nutritive value (vitamins, etc.):	Percent
Enough	42.3
Not enough	9.6
Not interested	15.2
Don't know	32.9
Total	100.0
Whether it is raw or cooked:	Percent
Enough	66.7
Not enough	7.2
Not interested	6.1
Don't know	20.0
Total	100.0

30/ Of the 1292 respondents asked this question some did not answer and a few gave more than one reason. Not related to packaging, but analysis placed in sequence with questions on questionnaire.

Particular Preferences - Frozen Fish and Shellfish (Continued)

Packaging (Continued)

Would you look at this list and tell me whether the information on the package about each one is enough or not enough? (Continued)

	Percent
Kind of fish:	
Enough	82.7
Not enough	3.7
Not interested	4.3
Don't know	9.3
Total	100.0
Cut of fish:	Percent
Enough	71.6
Not enough	6.6
Not interested	5.7
Don't know	16.1
Total	100.0
Recipes:	Percent
Enough	43.2
Not enough	14.6
Not interested	20.7
Don't know	21.5
Total	100.0
Number asked	1292

What size package do you prefer?

	Percent
1/2 pound	12.6
1 pound	60.4
1 1/2 pounds	9.7
2 pounds	11.7
Other size	1.2
Don't know	2.9
Blank, etc.	1.5
Total	100.0
Number asked	1292

Particular Preferences - Frozen Fish and Shellfish (Continued)

Packaging (Continued)

How about the shape of the package?

	Percent
Long and flat	58.5
Short and thick	12.8
Any shape	7.7
Depends on cut	.5
Miscellaneous	.3
Blank, etc.	20.2
Total	100.0
Number asked	1292

Grading

Do you think it would be a good idea to have some grading on frozen fish, or wouldn't it make any difference to you?

	Percent
Good idea	72.2
Bad idea	1.1
Makes no difference	25.9
Blank, etc.	.8
Total	100.0
Number asked	1292

Special products

Do you prefer to buy raw or already cooked frozen shellfish and fish?

	Percent
Shellfish:	
Raw	71.6
Already cooked	19.0
Blank, etc.	9.4
Total	100.0
Number asked	480

Special products (Continued)

Do you prefer to buy raw or already cooked frozen shellfish and fish? (Continued)

Fish:	Percent
Raw	82.9
Already cooked	9.1
Blank, etc.	8.0
Total	100.0
Number asked	1292

Have you bought frozen products that were already breaded?

	Percent
Shellfish:	
Yes	32.5
No	59.4
Blank, etc.	8.1
Total	100.0
Number asked	480
Fish:	Percent
Yes	10.6
No	81.0
Blank, etc.	8.4
Total	100.0
Number asked	1292

Do you like breaded frozen shellfish and fish?

	Percent
Shellfish:	
Like	72.5
Do not	23.8
Don't know	3.7
Total	100.0
Number asked 31/	164

31/ There were 156 respondents who had bought breaded frozen shellfish and 137 who had bought breaded frozen fish. A few respondents who hadn't bought breaded products were asked these questions also.

Special products (Continued)

Do you like breaded frozen shellfish and fish? (Continued)

Fish:	Percent
Like	52.4
Do not	29.5
Don't know	18.1
Total	100.0
Number asked 32/	166

Do you think you would like a complete frozen (shellfish) (fish) dinner containing the fish, potatoes and vegetables that is packaged in a ready-to-heat container?

Shellfish:	Percent
Would like	24.6
Wouldn't like	45.8
Don't know	20.8
Blank, etc.	8.8
Total	100.0
Number asked	480

Fish:	Percent
Would like	21.4
Wouldn't like	51.7
Don't know	20.0
Blank, etc.	6.9
Total	100.0
Number asked	1292

32/ There were 156 respondents who had bought breaded frozen shellfish and 137 who had bought breaded frozen fish. A few respondents who hadn't bought breaded products were asked these questions also.

Particular Preferences - Frozen Fish and Shellfish (Continued)

Mail Order 33/

Do you ever get frozen fish or shellfish by mail order?	Percent
Yes	2.4
No	97.6
Total	100.0
Number asked	668

Did you receive the frozen fish in satisfactory condition?	Percent
Yes	81.3
Blank, etc.	18.7
Total	100.0
Number asked	16

Are there any improvements you could suggest in the sale of frozen fish and shellfish by mail order?

Data insufficient - not analyzed

Is there any particular reason why you never purchased frozen fish or shellfish by mail?	Percent
Never heard of frozen fish by mail order	15.8
Convenient stores	10.9
Not available	8.9
Don't like idea	8.1
Too large quantity	3.8
Fresh fish available	.9
Freeze own fish	.8
Bad experience	.5
Price	.3
No storage space	.3
Afraid of spoilage	.3
Supply of meat at home	.1
Blank, etc.	49.3
Total	100.0
Number asked	652

33/ In rural farm and non-farm areas only.

Mail order (Continued)

If mail order were available, would you purchase it by mail?

Data insufficient - not analyzed. (Indications are that there is very little interest in mail order purchase.)

Classification Data

Who in family decides whether or not to serve fish?

	Percent
Housewife	76.2
Husband	6.6
Family	7.9
Other female members in household	1.3
Other male members in household	.4
Blank, etc.	7.6
Total	100.0
Number asked	2473

How many people are there living in your household altogether, counting children and babies and any relatives or other adults including roomers or boarders?

Adults	6253
Children	2530

Age

Under 5 years of age	1526
5-14	840
15-19	611
20-24	488
25-34	1183
35-44	1312
45-54	1086
55-64	688
65 and over	652
Age not indicated	397

Position in household

Grandfather	73
Grandmother	92
Husband	2038
Wife	2398
Son	1732
Daughter	1646
Brother	62
Sister	81
Roomer	99
Other, blank, not given, etc.	562

Do roomers or boarders eat in or out?

In	41
Out	21
Blank, etc.	37

Classification Data (Continued)

What kind of work does the head of your household do?

Professional and semi-professional	157
Farmers, farm laborers	375
Proprietors, managers, officials	213
Clerical and kindred workers	185
Salesmen	104
Craftsmen, foremen	423
Operatives, service workers	447
Domestic service	6
Housework	40
Laborers	140
Services (Armed Forces)	24
Retired	230
Refused, blanks, etc.	129
Total	2473

The approximate income of your whole family 34/

Under $500 a year	45
$500 - 749	20
750 - 999	32
1000-1249	45
1250-1499	74
1500-1999	69
2000-2499	158
2500-2999	282
3000-3999	381
4000-4999	212
5000-7499	130
7500-over	65
Refused or blank, etc.	960
Total	2473

34/ Adjusted to before taxes.

Classification Data (Continued)

Age of respondents:

15-19	26
20-24	121
25-34	538
35-44	602
45-54	526
55-64	345
65 and over	268
Blank, etc.	47
Total	2473

Region:

Northeast	685
North Central	732
South	734
West	322
Total	2473

Color:

White	2226
Negro	216
Other non-white	12
Blank, etc.	19
Total	2473

Farm, non-farm:

Farm	571
Non-farm	1873
Blank, etc.	29
Total	2473

City size:

500,000 and over	516
50,000 - 499,999	406
2,500 - 49,999	620
Remainder	931
Total	2473

Classification Data (Continued)

In rural areas

Do you (or does your family) raise most of the food you use or do you (or you family) buy most of it?

Raise	341
Buy	199
Can't say	37
Total	577

Do you have any income from work off the farm not include in the above income?

Yes	74
No	358
No answer, blank, etc.	145
Total	577

What was the last grade you completed in school?

0--4 years	151
5	87
6	122
7	141
8 grade school	505
9	146
10	176
11	125
12 high school	623
13-15	197
16 college	103
over 16	20
Blanks, etc.	77
Total	2473

In what country were your parents born?

United States-----1705 One or both parents foreign born-------768

Total - 2473

Religion:

Catholic---714 Protestant---1630 Jewish---91 Blanks, etc.----38

Total - 2473

A P P E N D I X

FISH AND SHELLFISH QUESTIONNAIRE

Family Name ..... Location number.....

Street Address ..... Apt.....

City or Town..... Date of Interview.....

RESULTS OF CALLS AT HOUSEHOLD

	1st Call	2nd Call	3rd Call	
HOUSEWIFE HOME				38–
NOT HOME				39–
REFUSAL				40–
				41–

We are making a survey of certain foods and I would like your opinion about them and, in some cases your ideas for improvement.

1. First I'd like to ask: Does your family generally eat its main meal at home or somewhere else?

At home..... *(Skip to Q. 3)* Somewhere else.....

2. *(If "Somewhere else")* About how often do you cook dinner at home?

More than once a week..... Less than once a week.....

(IF LESS THAN ONCE A WEEK, DISCONTINUE INTERVIEW)

42–1

3. Do you do the cooking for the family?

Yes.....43–1 No.....2

4. Do you do the food buying for the family?

Yes.....44–1 No.....2

(IF "NO" TO QUESTION 3 AND 4 DISCONTINUE INTERVIEW)

As you probably know, there are various ways that fish and shellfish can be bought nowadays—That is, they can be bought both frozen and fresh as well as canned or smoked. Now I'd like to ask you first: *(Interviewer: Start at arrow ➔ on left side of page.)*

Interviewer: Ask section a for all types then return and ask across for each type	a Have you served it during the past year?	b *(If "yes" to a)* When was the last time you served _____? *(Ask about type. That is, frozen shellfish, fresh shellfish, etc.)*	c Is there any particular season that you serve it more often than other seasons? *Interviewer: (If "yes,") ask:* "What season?"	d *(If "yes" to c)* How often do you serve it in this season? *(Indicate whether week, month, etc.)*	e Is there a particular day of the week that you serve it? *Interviewer: (If "yes",) ask:* "What day?"	f What do you particularly like about _____? *(Ask about type. That is frozen shellfish, fresh shellfish, etc.)*	g Can you generally get the kind of _____ *(Ask of type)* you want?	h What is the kind you usually serve in the _____ group? *(Ask about type)*
5. About frozen shellfish? That is, shrimp, lobster, crabmeat, etc.	Yes ....45–1 No .....2 Don't know.....3	.....days ago .....weeks ago .....months ago .....don't remember 46–	Summer....47–1 Winter....3 Fall .....2 Spring....4 No particular season 5	_____times per week, month, etc. 48–	Mon.....49–1 Fri.....5 Tues. .....2 Sat.....6 Wed. .....3 Sun. .....7 Thurs. .....4 No particular day 8	.... 50– 51–	Yes ... 52–1 No .....2 Don't know.....3	.... No particular kind _____ 53– 54–
6. How about fresh shellfish?	Yes ....55–1 No .....2 Don't know.....3	.....days ago .....weeks ago .....months ago .....don't remember 56–	Summer....57–1 Winter....3 Fall .....2 Spring ...4 No particular season 5	_____times per week, month, etc. 58–	Mon.....59–1 Fri.....5 Tues. .....2 Sat.....6 Wed. .....3 Sun. .....7 Thurs. .....4 No particular day 8	.... 60– 61–	Yes . 62–1 No .....2 Don't know.....3	.... No particular kind _____ 63– 64–
7. and canned shellfish — shrimp, lobster, crabmeat, etc.	Yes ....65–1 No .....2 Don't know.....3							.... 66– No particular kind 67–
8. How about frozen fish? That is, salmon, flounder, sole, etc.	Yes ....68–1 No .....2 Don't know.....3	.....days ago .....weeks ago .....months ago .....don't remember 69–	Summer....70–1 Winter....3 Fall .....2 Spring....4 No particular season 5	_____times per week, month, etc. 71–	Mon.....72–1 Fri.....5 Tues. .....2 Sat.....6 Wed. .....3 Sun. .....7 Thurs. .....4 No particular day 8	....73– 74– 75–	Yes ....76–1 No ..... 2 Don't know. ...3	.... No particular kind 77– 78– 79–
9. Fresh fish 42–2	Yes ....43–1 No .....2 Don't know.....3	.....days ago .....weeks ago .....months ago .....don't remember 44–	Summer....45–1 Winter ...3 Fall .....2 Spring....4 No particular season 5	_____times per week, month, etc. 46–	Mon.....47–1 Fri.....5 Tues. .....2 Sat.....6 Wed. .....3 Sun. .....7 Thurs. .....4 No particular day 8	....48– 49– 50–	Yes ....51–1 No ..... .2 Don't know.....3	.... No particular kind 52– 53– 54–
10. Canned fish	Yes ....55–1 No .....2 Don't know.....3							.... 56– 57– No particular kind 58–
11. Cured fish — pickled, salted, smoked, etc.	Yes ....59–1 No .....2 Don't know.....3							.... 60– .....61– No particular kind 62–

ASK EVERYONE WHO SERVED SOME TYPE OF FISH; THAT IS, ANY "YES" IN COLUMN a. IF RESPONDENT DID NOT, GO TO CLASSIFICATION DATA.

12. If it cost you the same amount to serve your family fresh fish or frozen fish, which would you prefer?

Fresh fish....63–1 Frozen fish....2 No preference....3
(Skip to Q. 14)

13. *(If "fresh" or "frozen")* What would you say is the main advantage of serving ____ fish?
("fresh" or "frozen")

64–
65–
(Write in)

14. Is there anyone in your family who will eat fresh fish but will not eat frozen fish?

Yes....66–1 No....2 Don't know....3
(Skip to Q. 16)

15. *(If "Yes")* How many are children under 15 and how many are adults that will not eat it?

Adults ____ 67–
Children under 15 ____ 68–

16. Generally speaking, do you think people serve fish more often when meats go up in price or not?

Yes....69–1 No....2 Don't know....3

17. *(Interviewer: Ask this question only of those who did not serve frozen fish in past year; that is, "No" in Question 8a)* Is there any particular reason why you don't use frozen fish?

Price ____ Taste ____ Availability ____
Other ____ 70–
71–
72–
(Write in)

18. *(Ask only if both fresh shellfish and frozen shellfish are served; that is "Yes" in 5a or 6a).* Which do you use more often—fresh or frozen shellfish?

Fresh shellfish....73–1 Frozen shellfish....2 About the same....3

19. *(Ask only if both fresh fish and frozen fish are served; that is "Yes" in 8a and 9a).* Which do you use more often—fresh or frozen fish?

Fresh fish....74–1 Frozen fish....2 About the same....3

Interviewer: Ask Questions 20 through 42 of those respondents who serve frozen fish: ("Yes" in Q. 8a)

20. How about frozen fish—do you think people buy frozen fish more often when meat prices go up than they ordinarily do or not?

42–3

Yes....43–1 No....2 Don't know....3

21. What methods of cooking frozen fish do you usually use—that is, frying, baking, broiling, boiling, or any other way?

Frying ____
Baking ____ Broiling { Flame / Electric / Out doors } ____ 44–
Boiling ____ 45–
Other ____ 46–
(Write in)

22. In your experience with frozen fish have you found the quality to be generally the same or does it change from time to time?

Changes....47–1 Generally the same....2 No opinion....3
(Skip to Q. 24)

23. *(If "Changes")* In what way have you found the quality to change?

48–
49–
(Write in)

24. Will you look at this card and tell me what cuts of frozen fish you prefer to buy?
(Interviewer: Hand respondent card and record by number)

1. Whole or round fish ____
2. Drawn fish ____
3. Dressed fish ____
4. Pan-dressed fish ____
5. Steaks ____
6. Fillets ____ 50–

None in particular....51–
52–

25. The last time you bought frozen fish, which of those cuts did you buy? 53–
54–
(Write in)

25a. Do you prefer fillets with the skin on or skinless?

Skin on....55–1 Skinless....2 No preference....3

26. Have you ever tried frozen Fillet of Flounder or Fillet of Sole?

Yes....56–1 No....2 Don't remember....3
(Skip to Q. 29)

27. *(If "Yes")* In some sections of the country you can get both East Coast and West Coast Fillet of Flounder and Fillet of Sole. Do you happen to know whether you ever tried East Coast Fillet of Sole or Flounder, or West Coast Fillet of Sole or Flounder?

Tried East Coast Fillet of Sole or Flounder ____ 57–1
Tried West Coast Fillet of Sole or Flounder ____ 3
Tried both ____ 2
Don't know ____ 4
(Skip to Q. 29)

28. *(If respondent has tried both)* Which do you like better, East Coast Fillet or West Coast Fillet of Sole or Flounder?

Like East Coast Fillet....58–1 Like West Coast Fillet....2
No preference....3

29. About how much frozen fish do you buy for each serving—that is, about how much of a pound do you count on for each member of the family?

____ Per person 59–
(Record in pounds per person)

30. At what type of store did you last buy frozen fish?

Fish store....60–1 Other ____
Super market....2
(Write in)

31. Can you get frozen fish at the place where you do most of your food shopping?

Yes....61–1 No....2 Don't know....3
(Skip to Q. 34)

32. *(If "Yes")* Can you generally get any kind you want at this store?

Yes....62–1 No....2 Don't know....3

33. Is there anything you dislike about the way frozen fish is kept in this store?

63–
64–
65–
(Write in)

34. The last time you bought frozen fish, was it unwrapped, wrapped only in cellophane, packed in a box or some other type of package?

Unwrapped ____ 66–1 Packed in box ____ 3
Wrapped only in cellophane ____ 2 Other ____
(Write in)

35. How did it happen you bought this type instead of another?

67–
68–
(Write in)

36. Do you prefer to buy your frozen fish unwrapped, wrapped only in cellophane, packed in a box or some other type package?

Unwrapped ____ 69–1 Packed in box ____ 3
Wrapped only in cellophane ____ 2 Other ____
(Write in)

37. *(Ask only if answer to question 36 is different from question 34)* Why do you prefer this type?

70–
71–
(Write in)

38. *(If the answer to question 34 or 36 is, "packed in a box," ask:)* Do you prefer all your frozen fish packed in a box or just certain kinds?

All....72–1 Certain kinds....2

38a. *(If "Certain kinds") ask:* What kinds? ____

73–
74–
75–
(Write in)

38b. Why don't you serve frozen fish more often than you do?

76–
77–
78–
(Write in)

39. Now I'd like to ask you a few last questions about your opinion of the packaging of frozen fish. Generally on the outside label of frozen food packages there are various instructions and information about the contents of the package. Would you look at this list and tell me whether the information on the package about each one is enough or not enough?

42–4

	Enough	Not enough	Not interested	Don't know
a. Weight of fish	43–1	2	3	4
b. Nutritive value (vitamins, etc.)	44–1	2	3	4
c. Whether it is raw or cooked	45–1	2	3	4
d. Kind of fish	46–1	2	3	4
e. Cut of fish	47–1	2	3	4
f. Recipes	48–1	2	3	4

40. As you probably know, all meats are graded so that when you buy them in a butcher store you can tell by the label on it whether it's top grade, medium etc. Do you think it would be a good idea to have some grading on frozen fish, or wouldn't it make any difference to you?

Good idea 49–1 Bad idea 2 Makes no difference 3

41. What size package do you prefer—that is, do you prefer the ½ pound size, the one pound size, the 1½ pound size, or the two pound size?

½ lb. size 50–1 2 lb. size 4
1 lb. size 2 Other 5
1½ lb. size 3 Don't know 6

42. How about the shape of the package? Do you prefer it long and flat, short and thick, or do you prefer some other shape?

Long and flat 51–1 Short and Thick 2

Other _____
(Write in)

Interviewer: Ask respondents who serve either frozen shellfish or frozen fish. Record answers separately for each.

		Frozen shellfish	Frozen fish
43. Do you prefer to buy raw or already cooked frozen (shellfish) (fish)?	Raw	52–1	56–1
	Already-cooked	2	2
44. Have you bought frozen (shellfish) (fish) products that were already breaded?	Yes	53–1	57–1
	No	2	2
45. *(If "Yes" to quest. 44)* Do you like breaded frozen (shellfish) (fish)?	Like	54–1	58–1
	Do not	2	2
	Don't know	3	3
46. Do you think you would like a complete frozen (shellfish) (fish) dinner containing the fish, potatoes and vegetables that is packaged in a ready-to-heat container?	Would like	55–1	59–1
	Wouldn't like	2	2
	Don't know	3	3

ASK ONLY IN RURAL AREAS

47. Do you ever get frozen fish or shellfish by mail order?

Yes 60–1 No 2
(Skip to Q. 50)

48. *(If "Yes")* Did you receive the frozen fish in satisfactory condition?

Yes 61–1 No 2

49. Are there any improvements you could suggest in the sale of frozen fish and shellfish by mail order?

62–
63–
(Write in)

None

50. *(If "No" to Q. 47)* Is there any particular reason why you never purchased frozen fish or shellfish by mail?

64–
65–
(Write in)

None

51. *(If answer to question 50 is "not available," "no mail order here," etc.,)* ask: If mail order were available, would you purchase it by mail?

Yes 66–1 No 2 Don't know 3

ASK OF EVERYONE

52. Who in the family decides whether or not to serve fish?

67–
(Write in)

CLASSIFICATION DATA

A. How many people are there living in your household altogether, counting children and babies and any relatives or other adults including roomers or boarders?

1–
Number 2–

B. What is the approximate age of each person and position in household (mother, father, daughter, son, roomer, boarder, etc.)?

	Age	Position in household		Age	Position in household
a.	3–	4–	f.	13–	14–
b.	5–	6–	g.	15–	16–
c.	7–	8–	h.	17–	18–
d.	9–	10–	i.	19–	20–
e.	11–	12–	j.	21–	22–

INTERVIEWER ASK: 1. Are there any children under one year of age in this household? *(Record above if not already listed)*

2. Do roomers or boarders eat in or out?

In 23–1 Out 2

C. What kind of work does the head of your household do?

24–
(Kind of work, not kind of business)

D. In which of these letter groups does the approximate income of your whole family fall? *(Hand respondent card)*

a b c d e f g h i j k l 25–

Don't know or refused 26–

E. Is this before or after deduction for income tax, social security, etc.?

Before 27–1 After 2 Don't know 3

ASK E–1 AND E–2 ON FARMS

1. Do you (or does your family) raise most of the food you use or do you (or your family) buy most of it?

Raise 28–1 Buy 2 Can't say 3

2. Do you have any income from work off the farm not included in the above income?

Yes 29–1 No 2

F. What was the name of the last school you attended (or the school you are now attending)?

_____

G. What was the last grade you completed in school?
(Interviewer: Record last grade completed)

0-4 years 30–1
5 years 2
6 years 3
7 years 4
8 (through grade school) 5
9 years 6
10 years 7
11 years 8
12 (through high school) 9
13-15 years 0
16 (through college) X
Over 16 Y

H. In what country were your parents born? 31–
(Write in)

I. *(Ask or estimate)* Religion:

Catholic 32–1 Protestant 2 Jewish 3

Other _____
(Write in)

AUTOMATIC CLASSIFICATION

J. Age of respondents

15 - 19	33–1
20 - 24	2
25 - 34	3
35 - 44	4
45 - 54	5
55 - 64	6
65 and over	7

K. Color

White	34–1
Negro	2
Other Non-White	3

L. Farm, non-farm

Farm	35–1
Non-farm	2

GENERAL COMMENTS:

36–
37–

Interior Duplicating Section